

What is claimed is:

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- 5 1. A method for preventing or inhibiting metastasis of a cancer of epithelial cell origin, comprising the step of administering to an organism suffering from a cancer of epithelial cell origin a compound that inhibits arachidonic acid release by cells of said cancer, by a route and in an amount effective to inhibit or prevent metastasis of said  
10 tumor.
  - 15 2. A method according to claim 1, wherein said compound is an inhibitor of phospholipase A<sub>2</sub> or cyclooxygenase.
  - 20 3. A method according to claim 1, wherein said compound is mepacrine or indomethacin.
  - 25 4. A method according to claim 1, wherein said compound is a lipocortin, a mutein of a lipocortin, a peptide analog of a lipocortin, or a mimetic of lipocortin.
  - 30 5. A method according to claim 1, wherein said compound is a uteroglobin, a mutein of a uteroglobin, a peptide analog of a uteroglobin or a mimetic of uteroglobin.
  6. A method according to claim 1, wherein said  
30 compound is a uteroglobin.
  7. A method according to claim 6, wherein said  
compound is human uteroglobin.
  - 35 8. A method according to claim 1, wherein said tumor is a cancer of the prostate gland in a human patient.

9. A method according to claim 2, wherein said tumor is a cancer of the prostate gland in a human patient.

5 10. A method according to claim 5, wherein said tumor is a cancer of the prostate gland in a human patient.

10 11. A method according to claim 6, wherein said tumor is a cancer of the prostate gland in a human patient.

15 12. A method according to claim 7, wherein said tumor is a cancer of the prostate gland in a human patient.

13. A method according to claim 1, wherein said method is used in conjunction with another treatment.

20 14. A method according to claim 13, wherein said treatment is surgical intervention, radiation therapy, hormonal therapy, immunotherapy, chemotherapy, cryotherapy or gene therapy.

25 15. A pharmaceutical composition for inhibiting or preventing metastasis of a cancer of epithelial cell origin, comprising: (i) a compound that inhibits arachidonic acid release by cells of a tumor of epithelial cell origin effective to prevent or inhibit metastasis of said tumor in an organism and (ii) a carrier for effective therapeutic administration of said compound to said organism.

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35 16. A composition according to claim 15, wherein said compound is an inhibitor of phospholipase A<sub>2</sub> or cyclooxygenase.

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17. A composition according to claim 15, wherein said compound is mepacrine or indomethacin.

5 18. A composition according to claim 17, wherein said compound is a lipocortin, a mutein of a lipocortin, a peptide analog of a lipocortin or a mimetic of lipocortin.

10 19. A composition according to claim 15, wherein said compound is a uteroglobin, a mutein of a uteroglobin a peptide analog of a uteroglobin or a mimetic of uteroglobin.

15 20. A composition according to claim 19, wherein said compound is a uteroglobin.

21. A composition according to claim 20, wherein said compound is human uteroglobin.

20 22. A method for determining metastatic potential of a tumor of epithelial cell origin, comprising the steps of:

25 (A) determining an effector of arachidonic acid release in cells in a biopsy sample of a tumor;

(B) comparing effector in tumor cells in said biopsy sample with effector in fiduciary cells, and

30 (C) determining metastatic potential, wherein effector in said tumor cells characteristic of normal fiduciary cells or characteristic of fiduciary cells of benign tumors indicates low metastatic potential and effector in said tumor cells characteristic of  
35 fiduciary cells of metastatic tumors indicates high metastatic potential.

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23. A method for determining metastatic potential of a tumor, according to claim 22, wherein said effector is an inhibitor of  $PLA_2$  or cyclooxygenase.

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24. A method for determining metastatic potential of a tumor according to claim 23, wherein said inhibitor is uteroglobin.

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25. A method according to claim 22, wherein said effector is determined assaying a protein in cells of said tumor.

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26. A method for determining metastatic potential of a tumor, according to claim 25, wherein said effector is an inhibitor of  $PLA_2$ .

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27. A method for determining metastatic potential of a tumor according to claim 26, wherein said inhibitor is uteroglobin.

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28. A method according to claim 25, wherein said protein is determined by immunocytochemistry.

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29. A method for determining metastatic potential of a tumor according to claim 28, wherein said effector is an inhibitor of  $PLA_2$ .

30. A method for determining metastatic potential of a tumor according to claim 29, wherein said inhibitor is uteroglobin.

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31. A method according to claim 22, wherein said effector is determined by assaying an mRNA in cells of said tumor.

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32. A method for determining metastatic potential of a tumor according to claim 31, wherein said effector is an inhibitor of  $PLA_2$ .

5           33. A method for determining metastatic potential of a tumor according to claim 32, wherein said inhibitor is uteroglobin.

10           34. A method according to claim 31, wherein said mRNA is determined by *in situ* hybridization.

15           35. A method for determining metastatic potential of a tumor, according to claim 34, wherein said effector is an inhibitor of  $PLA_2$ .

            36. A method for determining metastatic potential of a tumor according to claim 35, wherein said inhibitor is uteroglobin.

20           37. A method according to claim 32, wherein an aberrant mRNA is determined.

25           38. A method for determining metastatic potential of a tumor according to claim 37, wherein said inhibitor is uteroglobin.

30           39. A method according to claim 25, wherein said tumor is a prostatic adenocarcinoma, and said inhibitor is uteroglobin.

            40. A method according to claim 31, wherein said tumor is a prostatic adenocarcinoma, and said inhibitor is uteroglobin.

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41. A kit for determining metastatic potential of a tumor, comprising:

(A) a first reagent that binds specifically to an effector of arachidonic acid release in cells in a biopsy sample prepared for determination of said effector, and

(B) a second reagent for detectably labelling said primary binding reagent bound specifically to cells in said biopsy sample,

wherein the determination of said effector tumor is diagnostic of the metastatic potential of said tumor.

42. A kit according to claim 41, wherein said effector is an inhibitor of  $PLA_2$ .

43. A kit according to claim 42, wherein said inhibitor is uteroglobin.

44. A kit according to claim 41, wherein said first reagent is an antibody.

45. A kit according to claim 44, wherein said effector is an inhibitor of  $PLA_2$ .

46. A kit according to claim 45, wherein said inhibitor is uteroglobin.

47. A kit according to claim 41, wherein said first reagent is a hybridization probe.

48. A kit according to claim 47, wherein said effector is an inhibitor of  $PLA_2$ .

49. A kit according to claim 48, wherein said inhibitor is uteroglobin.

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50. A method for identifying prostatic intraepithelial neoplasia, comprising the steps of:

(A) determining an effector of arachidonic acid release in cells in a biopsy sample of tissue;

(B) comparing effector in cells in said biopsy sample with effector in fiduciary cells, and

(C) identifying presence of prostatic intraepithelial neoplasia, wherein a high concentration of effector in said biopsy sample indicates normal tissue or low grade prostatic intraepithelial neoplasia, a low concentration of effector in said biopsy sample indicates high grade prostatic intraepithelial neoplasia, and substantially no concentration of effector in said biopsy sample indicates cancer.

51. A method for identifying prostatic intraepithelial neoplasia according to claim 50, wherein said effector is an inhibitor of  $PLA_2$  or cyclooxygenase.

52. A method for identifying prostatic intraepithelial neoplasia according to claim 51, wherein said inhibitor is uteroglobin.

53. A method according to claim 50, wherein said effector is determined by assaying a protein in cells of said biopsy sample.

54. A method for identifying prostatic intraepithelial neoplasia according to claim 53, wherein said effector is an inhibitor of  $PLA_2$ .

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55. A method for identifying prostatic intraepithelial neoplasia according to claim 54, wherein said inhibitor is uteroglobin.

5 56. A method according to claim 53, wherein said protein is determined by immunocytochemistry.

57. A method for identifying prostatic intraepithelial neoplasia according to claim 56,  
10 wherein said effector is an inhibitor of  $PLA_2$ .

58. A method for identifying prostatic intraepithelial neoplasia according to claim 57,  
15 wherein said inhibitor is uteroglobin.

59. A method according to claim 50, wherein said effector is determined by assaying an mRNA in cells of said biopsy sample.

20 60. A method for identifying prostatic intraepithelial neoplasia according to claim 59, wherein said effector is an inhibitor of  $PLA_2$ .

25 61. A method for identifying prostatic intraepithelial neoplasia according to claim 60, wherein said inhibitor is uteroglobin.

30 62. A method according to claim 59, wherein said mRNA is determined by *in situ* hybridization.

63. A method for identifying prostatic intraepithelial neoplasia according to claim 62,  
wherein said effector is an inhibitor of  $PLA_2$ .

35 64. A method for identifying prostatic intraepithelial neoplasia according to claim 63, wherein said inhibitor is uteroglobin.

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65. A kit for identifying prostatic intraepithelial neoplasia, which comprises:

5 (A) a first reagent that binds specifically to an effector of arachidonic acid release in cells in a biopsy sample prepared for identification of said effector, and

10 (B) a second reagent for detectably labelling said primary binding reagent bound specifically to cells in said biopsy sample,

wherein the identification of said effector is diagnostic of said prostatic intraepithelial neoplasia.

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66. A kit according to claim 65, wherein said effector is an inhibitor of  $PLA_2$ .

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67. A kit according to claim 66, wherein said inhibitor is uteroglobin.

68. A kit according to claim 65, wherein said first reagent is an antibody.

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69. A kit according to claim 68, wherein said effector is an inhibitor of  $PLA_2$ .

70. A kit according to claim 69, wherein said inhibitor is uteroglobin.

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71. A kit according to claim 65, wherein said first reagent is a hybridization probe.

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72. A kit according to claim 71, wherein said effector is an inhibitor of  $PLA_2$ .

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73. A kit according to claim 72, wherein said inhibitor is uteroglobin.

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